

COVID-19 morbidity and mortality by race, ethnicity and spoken language in Washington state

Washington State Department of Health

February 08, 2022



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NOTE: Beginning the week of December 23, 2020, probable cases are included in the metrics calculated for morbidity and mortality associated with race, ethnicity, and spoken language. Probable cases are individuals with a positive antigen test for COVID-19. Also, as of December 16, 2020, probable cases are included in all case, hospitalization, and death counts on the Washington State Department of Health COVID-19 dashboard. Probable cases since June 2020, when the first antigen results were reported in Washington, are now included in the dashboard. This places the report on “COVID-19 Morbidity and Mortality by Race, Ethnicity and Spoken Language in Washington State” in alignment with the Washington State Department of Health COVID-19 Data Dashboard.

Overview

The impacts of COVID-19 morbidity and mortality have not been felt equally by all populations in Washington state. The pandemic has exacerbated the underlying and persistent inequities among historically marginalized communities and those disproportionately impacted due to structural racism and other forms of systemic oppression. This report provides an overview of confirmed or probable COVID-19 case, hospitalization, and death rates by race and ethnicity at state and regional levels. It also provides counts and percentages of confirmed or probable cases and hospitalizations by primary language spoken. Throughout this report, the COVID-19 case definition includes both molecular testing and antigen testing. Molecular positive cases are considered confirmed cases and antigen positive cases are considered probable cases. All hospitalization, death, and testing data reported here are based on positive molecular or antigen test results.

All rates presented in this report are adjusted for age using the Washington state population distribution based on the Office of Financial Management’s (OFM) April 1, 2020 population estimates by age, sex, race, and Hispanic origin. The rate calculations are for the population groups available from OFM for the Washington state population and follow Department of Health guidelines. Hispanic ethnicity was assigned first, regardless of race, and then racial groups were identified for those identifying as non-Hispanic. Based on this, the current report includes the following groups:

- Hispanic; and

- non-Hispanic race categorizations for white, Black, Native Hawaiian and Pacific Islander, Asian, and American Indian/Alaska Native.

While this allows assessment of data by race and ethnicity groups, this categorization is incomplete and does not reflect the diversity of people and experiences across the state. Additionally, there is a significant lack of race and ethnicity reporting for confirmed or probable COVID-19 cases and hospitalizations (about 29% missing) and for deaths (about 0% missing). Primary language spoken is missing for about 75% of cases and hospitalizations. Age information is missing for a small percentage of confirmed or probable cases (about 0.1%), and these cases are not included in age-adjusted rates. The lack of data limits our ability to draw firm conclusions; however, there are some concerning patterns reported below.

Cumulative age-adjusted confirmed or probable COVID-19 case, hospitalization, and death rates by race and ethnicity per 100,000 population

The table and figures below describe the counts and age-adjusted rates per 100,000 population in Washington by race and ethnicity for confirmed or probable cases, hospitalizations, and deaths for the entire time period from the start of the pandemic through 2022-02-07 based on the specimen collection date. 95% confidence intervals are included in the charts.

The data show that communities of color are disproportionately impacted by COVID-19 in significant ways, including the following.

COVID-19 confirmed or probable case rates

- Native Hawaiian and Pacific Islander (NHPI) and Hispanic populations have the highest age-adjusted confirmed or probable case rates while Asian and multiracial populations have the lowest case rates.
- Confirmed or probable case rates for NHPI and Hispanic populations are approximately three times higher than case rates for Asian and multiracial populations.
- Confirmed or probable case rates for Black populations are approximately two times higher than case rates among Asian and multiracial populations.

COVID-19 hospitalization rates among confirmed or probable cases

- Hospitalization rates among confirmed or probable COVID-19 cases are the highest for NHPI populations and lowest for multiracial populations.
- NHPI hospitalization rates among confirmed or probable COVID-19 cases are seven times higher than white populations.
- Hispanic hospitalization rates among confirmed or probable COVID-19 cases are two times higher than white populations.
- Hospitalization rates among confirmed or probable COVID-19 cases for Black and American Indian and Alaska Native (AIAN) populations are two times higher compared to white populations.

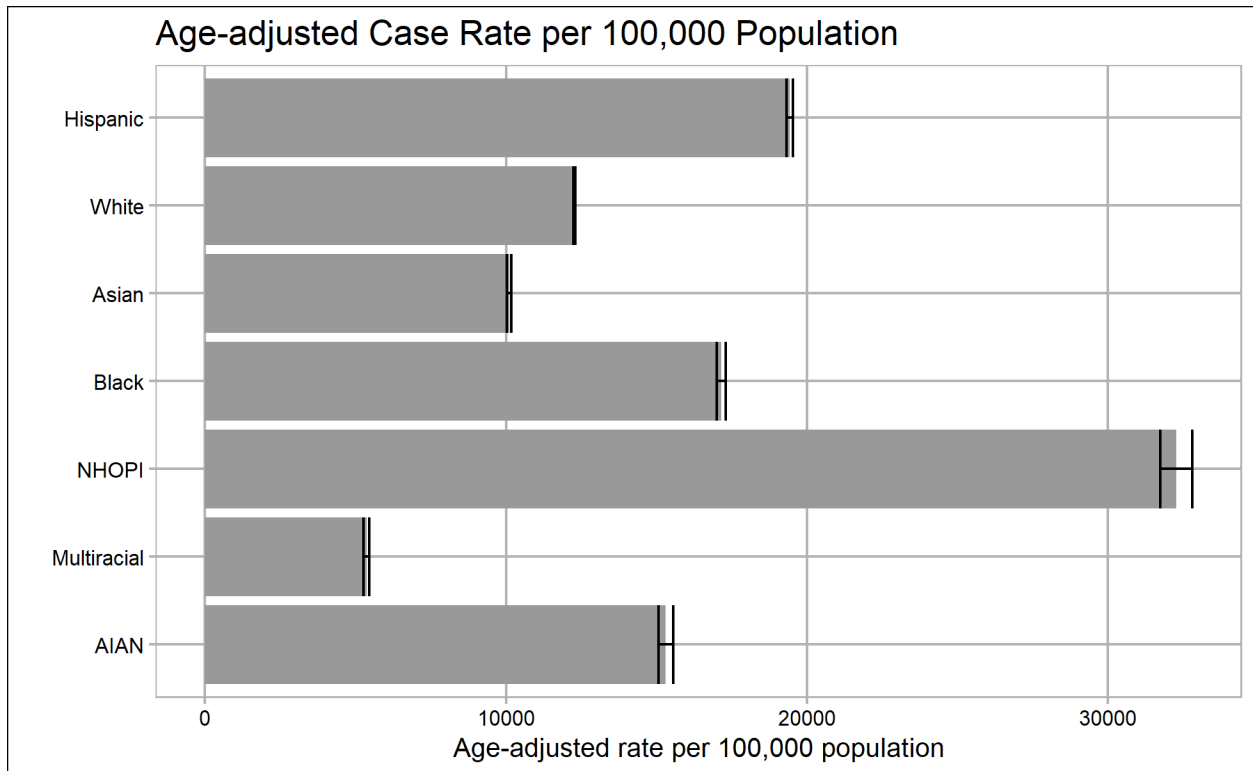
COVID-19 death rates among confirmed or probable cases

- Asian populations have the lowest death rates among confirmed or probable COVID-19 cases of all race/ethnicity groups.
- NHPI populations have death rates among confirmed or probable COVID-19 cases that are approximately five times higher than white populations.
- AIAN and Hispanic populations have death rates among confirmed or probable COVID-19 cases that are approximately three times higher than white populations.
- Black populations have death rates among confirmed or probable COVID-19 cases that are about twice as high as white populations.

Table 1. Confirmed or probable COVID-19 case, hospitalization, and death count and age-adjusted rates by race/ethnicity

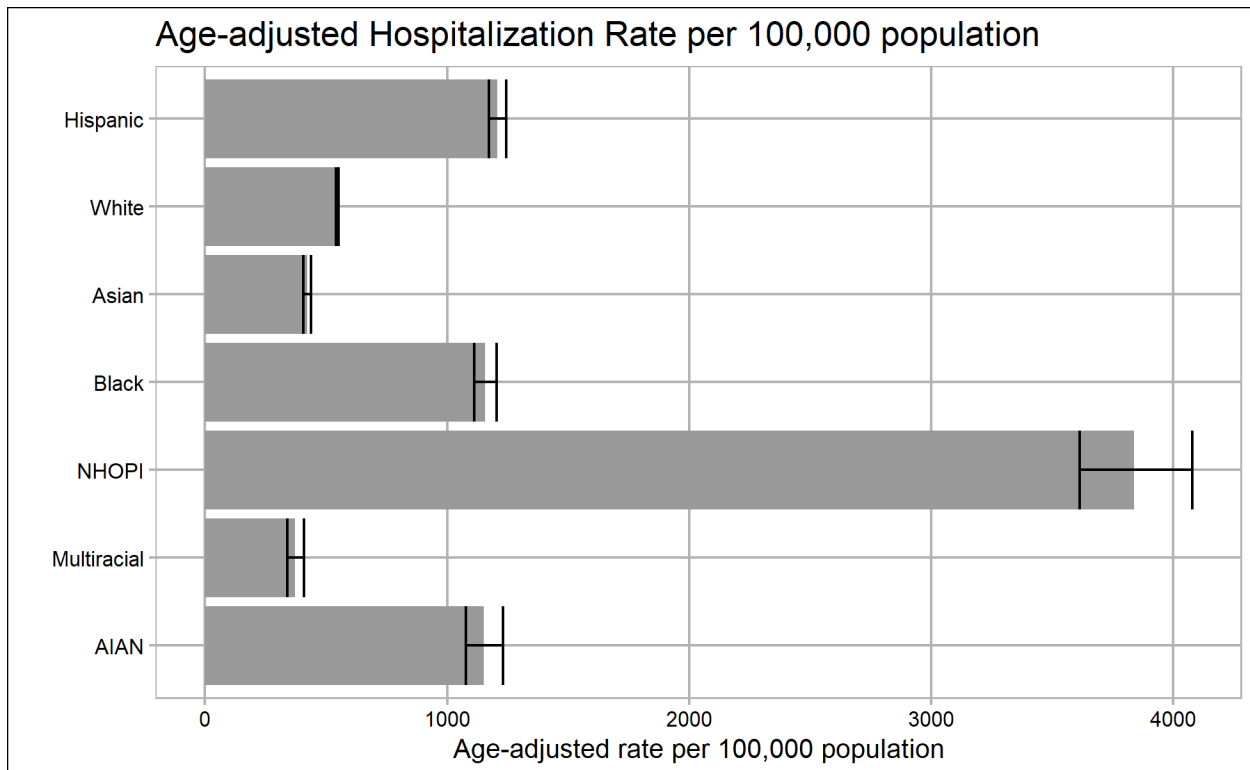
Race/Ethnicity	Case Count	Age-Adjusted Case Rate per 100,000	Hospitalization Count	Age-Adjusted Hospitalization Rate per 100,000	Death Count	Age-Adjusted Death Rate per 100,000
All Races	1,384,870	18088.2	56,022	731.7	11,094	144.9
Unknown	396,402		8,182		26	
Hispanic	196,310	19436.3	6,687	1208	1,138	326.7
White	604,446	12269	32,282	546.2	8,173	127.3
Asian	75,395	10108	2,524	421.4	631	125.9
Black	54,549	17152.3	2,800	1156.9	370	201.4
NHPI	18,288	32275.1	1,446	3838.2	190	701.7
Multiracial	16,632	5367.3	580	372	163	137.2
AIAN	14,783	15314.2	966	1152.6	249	356.9
Other	8,065		555		154	

The following graph indicates the age-adjusted confirmed or probable COVID-19 case rate per 100,000 population by race/ethnicity during the time period 2020-01-19 to 2022-02-07



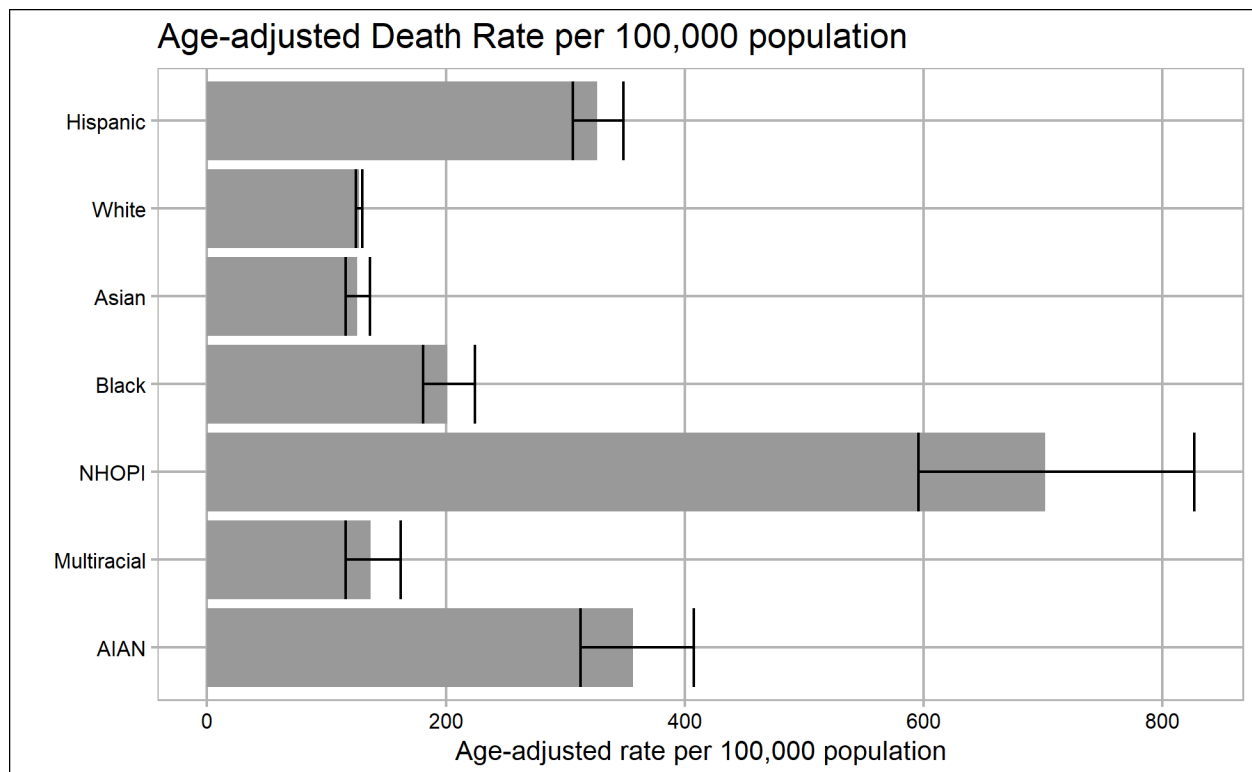
Source: Washington Disease Reporting System (WDRS)

The following graph indicates the age-adjusted hospitalization rate among confirmed or probable COVID-19 cases per 100,000 population by race/ethnicity during the time period 2020-01-19 to 2022-02-07



Source: Washington Disease Reporting System (WDRS)

The following graph indicates the age-adjusted death rate among confirmed or probable COVID-19 cases per 100,000 population by race/ethnicity during the time period 2020-01-19 to 2022-02-07



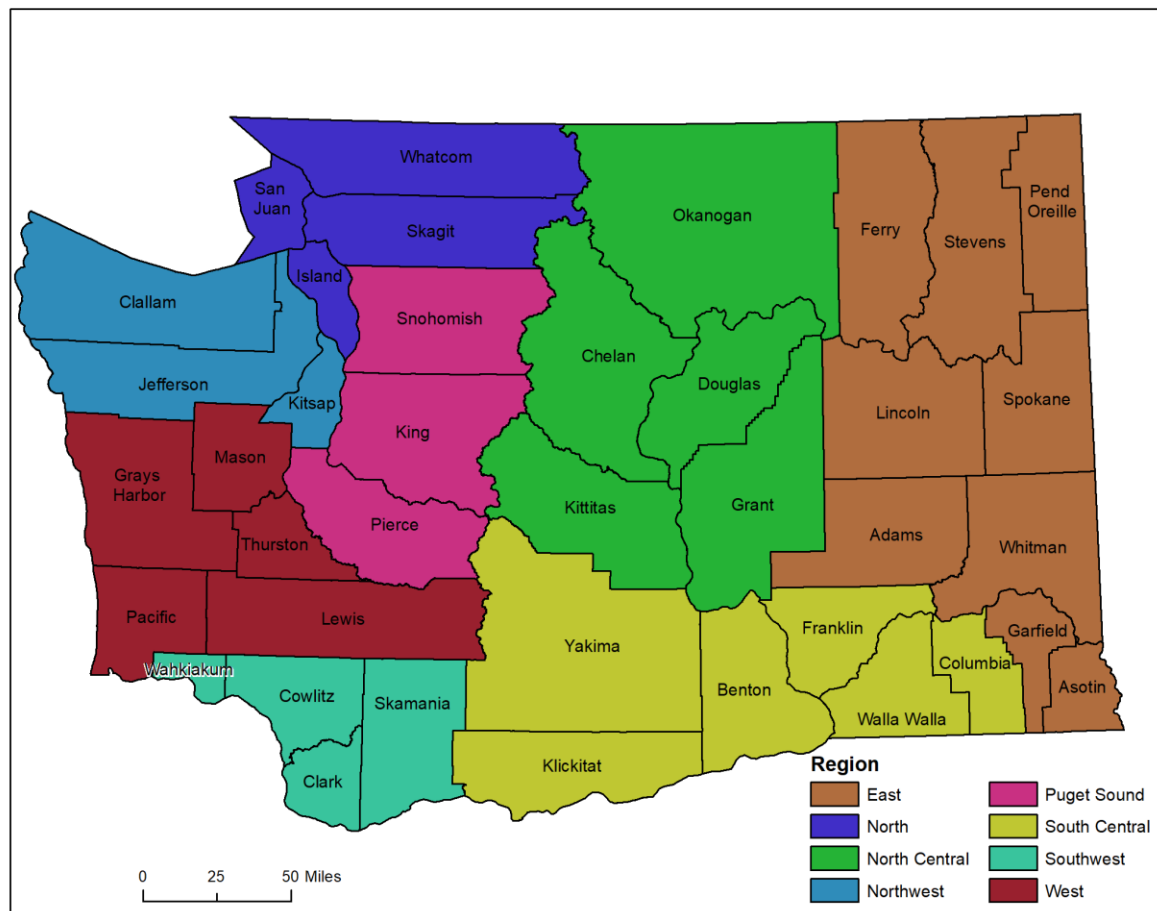
Source: Electronic Death Registration System (EDRS) and Washington Health and Life Events System (WHALES)

Analysis of confirmed or probable COVID-19 cases, hospitalizations, and deaths by geographic region

Regional groupings of Washington state counties

Some counties may not have sufficient case counts to analyze trends by race and ethnicity. In order to incorporate data from counties of all sizes, counties were assigned into one of 8 analytic regions (see Map of Washington Counties and Analysis Regions below). The regions presented were developed by the Washington State Department of Health in order to better understand geographic differences in disease spread and how disease spread may be changing over time. While infection rates may not be the same within any given region, this regional grouping allows for more specific geographic analyses without excluding any counties or communities due to concerns about smaller numbers.

Map of Washington counties by DOH analysis regions



Missing race/ethnicity data by region

The North and Northwest regions have the highest percentage of missing race/ethnicity data among confirmed or probable COVID-19 cases and the North Central and Puget Sound regions have the lowest percentage of missing data on race/ethnicity, as indicated in the following table. The total number of confirmed or probable cases, and the number and percentage of confirmed or probable cases with missing data are shown in Table 2.

Table 2. Counts and percentage of confirmed or probable COVID-19 cases with unknown race/ethnicity by DOH analytic region.

Region	Case Count	Cases with Unknown Race/Ethnicity	% Cases with Unknown Race/Ethnicity
East	149,662	41,571	28%
North	66,772	25,575	38%

Region	Case Count	Cases with Unknown Race/Ethnicity	% Cases with Unknown Race/Ethnicity
North Central	70,109	16,860	24%
Northwest	50,017	18,348	37%
Puget Sound	682,192	180,759	26%
South Central	169,994	51,666	30%
Southwest	102,986	34,865	34%
West	90,817	25,099	28%
Unknown	3,150	2,161	69%

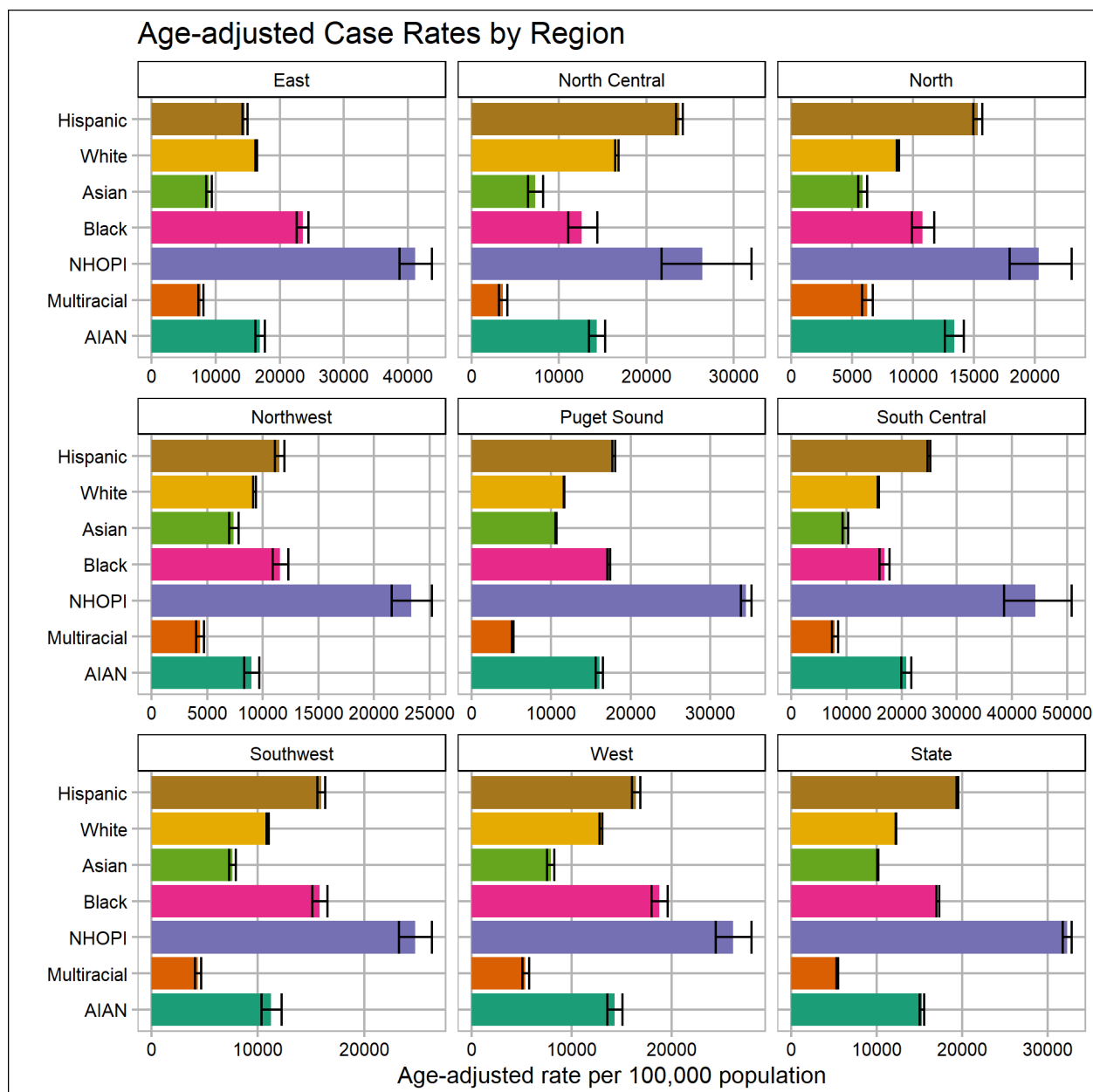
*Source: Washington Disease Reporting System (WDRS)
Includes data from 2020-01-19 to 2022-02-07*

Cumulative age-adjusted confirmed or probable COVID-19 case rates by race, ethnicity, and analytic region

The following figures describe the age-adjusted confirmed or probable COVID-19 case rates per 100,000 population by race/ethnicity and region. They were calculated using the confirmed or probable cases with known race/ethnicity (about 71% of all reported cases).

It is important to note that the numeric scale differs across regions, so use caution when comparing two or more regions, as their scales may differ. The last figure (lower right corner) presents the age-adjusted confirmed or probable COVID-19 case rates for the whole state.

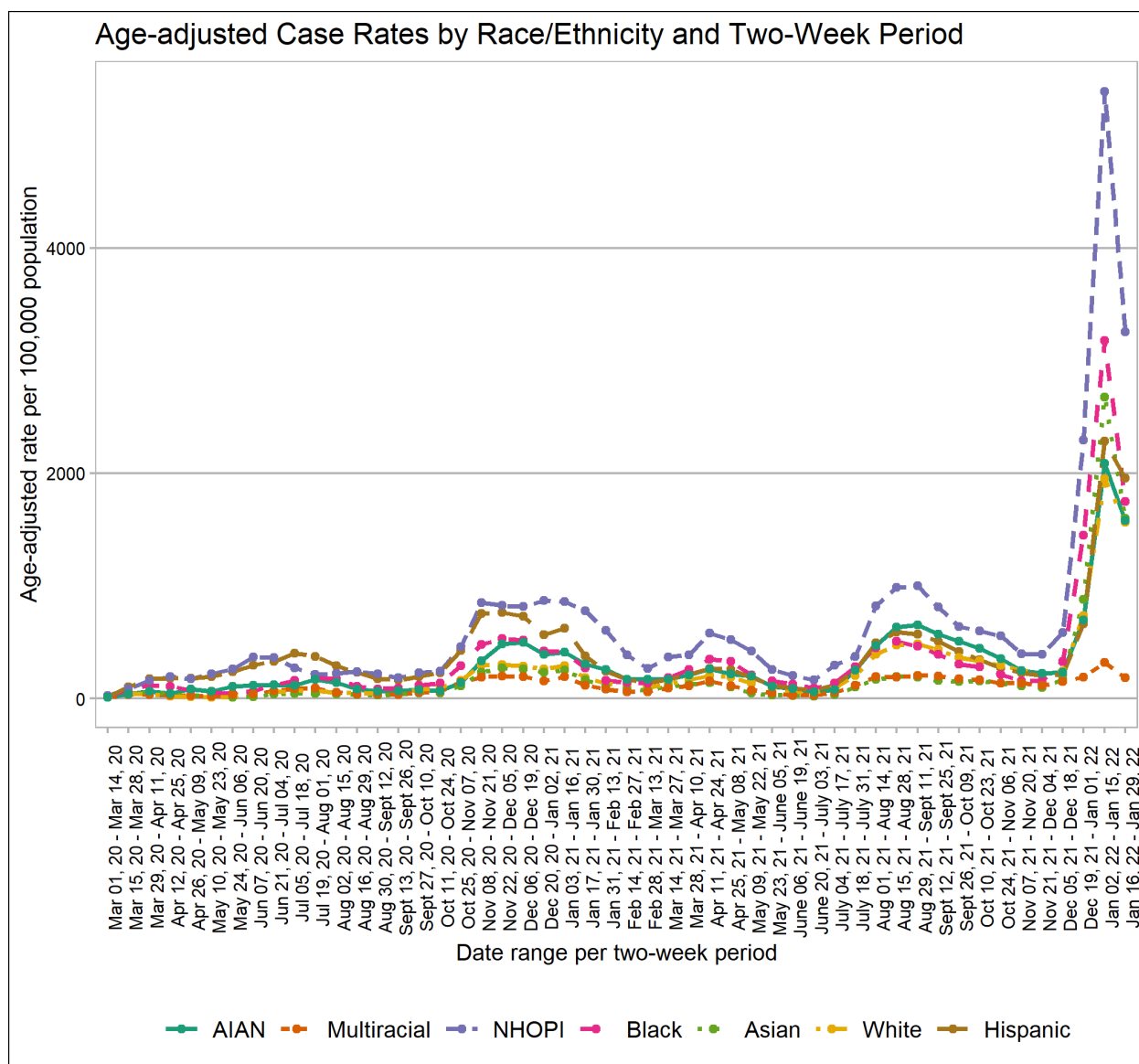
These data indicate that COVID-19 is found in significant numbers across racial and ethnic groups throughout the state, and it is not confined to certain areas, such as rural, urban, or suburban regions. Population centers in Puget Sound contribute substantially to the counts. However less populated regions, like South Central Washington, show larger rate differences by race/ethnicity, although they have smaller populations of racial and ethnic minorities. Further, while extreme disparities exist, people of all races and ethnicities are impacted.



Source: Washington Disease Reporting System (WDRS)
Includes data from 2020-01-19 to 2022-02-07

Age-adjusted confirmed or probable COVID-19 case rates by race and ethnicity per two-week period (Mar 2020-January* 2022)

*January 2022 data include all confirmed or probable cases with a specimen collection date through 2022-01-29 to include the most recent, complete two-week period of data collection.



Confirmed or probable COVID-19 case rates, adjusted for age by race and ethnicity, were calculated to better understand how race- and ethnicity-specific patterns may be changing over time by two-week period. Race/ethnicity-specific counts and age-adjusted rates increased for all race/ethnicity groups through July and early August 2020. All groups declined from early August to mid/late-August and flattened through September 2020. All race/ethnicity-age-adjusted rates began to rapidly increase in mid-October through the end of November. Rates of confirmed or probable cases remain highest for Hispanic and NHPI population, and higher Black and AIAN populations in comparison to white, Asian, and multiracial populations.

Table 3. Age-adjusted confirmed or probable COVID-19 case rates by race and ethnicity per two-week period (Mar 1, 2020 - January 29, 2022)

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
Hispanic	Mar 01, 20-Mar 14, 20	107	15.1	12.1	18.8
	Mar 15, 20-Mar 28, 20	704	103.1	94.5	112.4
	Mar 29, 20-Apr 11, 20	1,214	175.7	164.3	187.9
	Apr 12, 20-Apr 25, 20	1,372	176.9	166.1	188.4
	Apr 26, 20-May 09, 20	1,474	177.5	167.1	188.7
	May 10, 20-May 23, 20	1,709	195.4	184.7	206.7
	May 24, 20-Jun 06, 20	2,003	237.0	224.8	249.8
	Jun 07, 20-Jun 20, 20	2,497	293.3	279.8	307.5
	Jun 21, 20-Jul 04, 20	2,924	329.1	314.9	344.0
	Jul 05, 20-Jul 18, 20	3,783	403.1	388.1	418.6
	Jul 19, 20-Aug 01, 20	3,467	372.7	358.1	387.8
	Aug 02, 20-Aug 15, 20	2,663	289.9	276.9	303.4
	Aug 16, 20-Aug 29, 20	2,150	232.4	220.9	244.5
	Aug 30, 20-Sept 12, 20	1,640	176.1	166.1	186.7
	Sept 13, 20-Sept 26, 20	1,516	166.1	156.3	176.5

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Sept 27, 20-Oct 10, 20	1,814	191.0	180.8	201.8
	Oct 11, 20-Oct 24, 20	2,150	225.6	214.6	237.1
	Oct 25, 20-Nov 07, 20	4,100	423.8	408.6	439.6
	Nov 08, 20-Nov 21, 20	7,115	753.3	732.8	774.4
	Nov 22, 20-Dec 05, 20	7,296	764.3	743.7	785.5
	Dec 06, 20-Dec 19, 20	6,858	727.3	707.1	748.1
	Dec 20, 20-Jan 02, 21	5,276	564.3	546.4	582.8
	Jan 03, 21-Jan 16, 21	6,013	621.5	603.0	640.6
	Jan 17, 21-Jan 30, 21	3,511	378.4	363.5	393.9
	Jan 31, 21-Feb 13, 21	2,313	240.8	229.3	252.9
	Feb 14, 21-Feb 27, 21	1,673	170.6	161.1	180.7
	Feb 28, 21-Mar 13, 21	1,438	142.2	133.8	151.1
	Mar 14, 21-Mar 27, 21	1,761	168.0	159.1	177.4
	Mar 28, 21-Apr 10, 21	2,284	213.4	203.5	223.9
	Apr 11, 21-Apr 24, 21	2,861	265.4	254.4	276.9
	Apr 25, 21-May 08, 21	2,766	255.2	244.3	266.6

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	May 09, 21-May 22, 21	2,004	181.3	172.3	190.7
	May 23, 21-June 05, 21	1,271	117.8	110.4	125.6
	June 06, 21-June 19, 21	934	91.7	85.0	99.0
	June 20, 21-July 03, 21	744	73.5	67.3	80.2
	July 04, 21-July 17, 21	1,166	119.9	111.7	128.6
	July 18, 21-July 31, 21	2,656	253.4	242.3	265.0
	Aug 01, 21-Aug 14, 21	5,218	493.7	478.2	509.8
	Aug 15, 21-Aug 28, 21	6,104	591.1	573.7	609.0
	Aug 29, 21-Sept 11, 21	5,987	570.9	553.8	588.6
	Sept 12, 21-Sept 25, 21	5,447	507.4	491.5	523.9
	Sept 26, 21-Oct 09, 21	4,406	415.7	401.1	430.8
	Oct 10, 21-Oct 23, 21	3,565	345.0	331.6	358.9
	Oct 24, 21-Nov 06, 21	2,898	272.1	260.4	284.3
	Nov 07, 21-Nov 20, 21	2,361	225.3	214.5	236.6
	Nov 21, 21-Dec 04, 21	2,138	201.1	191.1	211.7
	Dec 05, 21-Dec 18, 21	2,374	215.0	204.9	225.6

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
White	Dec 19, 21-Jan 01, 22	6,990	662.4	644.5	680.8
	Jan 02, 22-Jan 15, 22	25,535	2,284.2	2,251.7	2,317.2
	Jan 16, 22-Jan 29, 22	21,603	1,955.5	1,924.8	1,986.7
	Mar 01, 20-Mar 14, 20	642	11.0	10.1	11.9
	Mar 15, 20-Mar 28, 20	2,392	42.4	40.7	44.1
	Mar 29, 20-Apr 11, 20	1,806	32.1	30.6	33.6
	Apr 12, 20-Apr 25, 20	1,043	18.3	17.2	19.5
	Apr 26, 20-May 09, 20	883	15.6	14.6	16.7
	May 10, 20-May 23, 20	603	10.9	10.0	11.8
	May 24, 20-Jun 06, 20	776	14.8	13.8	15.9
	Jun 07, 20-Jun 20, 20	1,343	25.9	24.5	27.3
	Jun 21, 20-Jul 04, 20	2,926	59.2	57.1	61.5
	Jul 05, 20-Jul 18, 20	3,522	69.9	67.6	72.3
	Jul 19, 20-Aug 01, 20	3,514	68.5	66.2	70.8
	Aug 02, 20-Aug 15, 20	2,785	54.7	52.7	56.8
	Aug 16, 20-Aug 29, 20	2,222	44.1	42.3	46.0

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Aug 30, 20-Sept 12, 20	2,240	44.6	42.7	46.5
	Sept 13, 20-Sept 26, 20	2,800	55.1	53.0	57.2
	Sept 27, 20-Oct 10, 20	3,929	77.9	75.5	80.4
	Oct 11, 20-Oct 24, 20	4,904	96.2	93.5	99.0
	Oct 25, 20-Nov 07, 20	8,071	159.1	155.6	162.7
	Nov 08, 20-Nov 21, 20	14,896	293.9	289.2	298.8
	Nov 22, 20-Dec 05, 20	15,175	297.3	292.6	302.1
	Dec 06, 20-Dec 19, 20	14,573	284.5	279.8	289.2
	Dec 20, 20-Jan 02, 21	13,290	259.8	255.4	264.3
	Jan 03, 21-Jan 16, 21	14,581	288.6	283.9	293.4
	Jan 17, 21-Jan 30, 21	9,206	182.3	178.6	186.1
	Jan 31, 21-Feb 13, 21	6,764	134.4	131.2	137.7
	Feb 14, 21-Feb 27, 21	5,204	104.1	101.3	107.0
	Feb 28, 21-Mar 13, 21	4,834	97.7	95.0	100.5
	Mar 14, 21-Mar 27, 21	6,351	129.5	126.3	132.8
	Mar 28, 21-Apr 10, 21	8,044	165.1	161.5	168.8

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Apr 11, 21-Apr 24, 21	9,979	204.9	200.9	209.0
	Apr 25, 21-May 08, 21	9,039	186.4	182.6	190.3
	May 09, 21-May 22, 21	6,515	133.4	130.2	136.7
	May 23, 21-June 05, 21	4,470	91.4	88.8	94.2
	June 06, 21-June 19, 21	3,099	62.4	60.2	64.7
	June 20, 21-July 03, 21	2,727	54.6	52.6	56.7
	July 04, 21-July 17, 21	4,457	90.5	87.8	93.2
	July 18, 21-July 31, 21	10,020	202.4	198.4	206.4
	Aug 01, 21-Aug 14, 21	19,273	390.3	384.8	396.0
	Aug 15, 21-Aug 28, 21	23,461	471.6	465.6	477.8
	Aug 29, 21-Sept 11, 21	23,838	481.3	475.2	487.6
	Sept 12, 21-Sept 25, 21	21,378	436.6	430.7	442.6
	Sept 26, 21-Oct 09, 21	17,769	362.7	357.3	368.1
	Oct 10, 21-Oct 23, 21	16,568	334.3	329.2	339.5
	Oct 24, 21-Nov 06, 21	14,678	296.1	291.3	301.0
	Nov 07, 21-Nov 20, 21	12,047	245.5	241.1	249.9

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
Asian	Nov 21, 21-Dec 04, 21	10,813	220.6	216.4	224.9
	Dec 05, 21-Dec 18, 21	11,754	243.5	239.1	248.0
	Dec 19, 21-Jan 01, 22	35,657	733.8	726.1	741.5
	Jan 02, 22-Jan 15, 22	93,888	1,952.7	1,940.1	1,965.4
	Jan 16, 22-Jan 29, 22	75,483	1,562.9	1,551.6	1,574.2
	Mar 01, 20-Mar 14, 20	121	18.8	15.6	22.6
	Mar 15, 20-Mar 28, 20	306	43.9	39.1	49.3
	Mar 29, 20-Apr 11, 20	376	54.5	49.2	60.5
	Apr 12, 20-Apr 25, 20	269	39.5	34.9	44.7
	Apr 26, 20-May 09, 20	154	21.9	18.6	25.8
	May 10, 20-May 23, 20	122	17.3	14.4	20.8
	May 24, 20-Jun 06, 20	86	11.8	9.5	14.6
	Jun 07, 20-Jun 20, 20	116	16.1	13.4	19.4
	Jun 21, 20-Jul 04, 20	294	39.8	35.4	44.7
	Jul 05, 20-Jul 18, 20	327	44.3	39.7	49.5
	Jul 19, 20-Aug 01, 20	327	45.3	40.6	50.6

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Aug 02, 20-Aug 15, 20	279	37.9	33.6	42.7
	Aug 16, 20-Aug 29, 20	264	35.6	31.4	40.2
	Aug 30, 20-Sept 12, 20	214	29.5	25.7	33.9
	Sept 13, 20-Sept 26, 20	255	35.2	31.0	39.9
	Sept 27, 20-Oct 10, 20	354	46.9	42.1	52.1
	Oct 11, 20-Oct 24, 20	380	49.9	45.0	55.3
	Oct 25, 20-Nov 07, 20	815	109.7	102.3	117.7
	Nov 08, 20-Nov 21, 20	1,718	230.5	219.6	241.9
	Nov 22, 20-Dec 05, 20	1,986	271.9	259.9	284.5
	Dec 06, 20-Dec 19, 20	1,868	261.2	249.3	273.6
	Dec 20, 20-Jan 02, 21	1,695	232.2	221.2	243.8
	Jan 03, 21-Jan 16, 21	1,804	249.7	238.2	261.8
	Jan 17, 21-Jan 30, 21	1,160	162.2	152.9	172.1
	Jan 31, 21-Feb 13, 21	757	105.0	97.6	112.9
	Feb 14, 21-Feb 27, 21	604	82.8	76.4	89.8
	Feb 28, 21-Mar 13, 21	535	71.2	65.3	77.6

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Mar 14, 21-Mar 27, 21	795	106.5	99.2	114.4
	Mar 28, 21-Apr 10, 21	940	121.9	114.2	130.1
	Apr 11, 21-Apr 24, 21	1,090	142.1	133.7	150.9
	Apr 25, 21-May 08, 21	789	102.0	95.0	109.6
	May 09, 21-May 22, 21	362	47.3	42.6	52.5
	May 23, 21-June 05, 21	232	31.4	27.5	35.8
	June 06, 21-June 19, 21	170	23.3	20.0	27.2
	June 20, 21-July 03, 21	147	19.1	16.2	22.5
	July 04, 21-July 17, 21	277	35.9	31.8	40.5
	July 18, 21-July 31, 21	759	100.3	93.3	107.9
	Aug 01, 21-Aug 14, 21	1,280	168.5	159.3	178.2
	Aug 15, 21-Aug 28, 21	1,435	192.1	182.2	202.5
	Aug 29, 21-Sept 11, 21	1,400	186.1	176.4	196.3
	Sept 12, 21-Sept 25, 21	1,201	161.3	152.3	170.9
	Sept 26, 21-Oct 09, 21	1,114	151.2	142.4	160.5
	Oct 10, 21-Oct 23, 21	1,118	152.9	144.0	162.3

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Oct 24, 21-Nov 06, 21	1,010	137.2	128.9	146.1
	Nov 07, 21-Nov 20, 21	802	109.6	102.2	117.7
	Nov 21, 21-Dec 04, 21	711	95.8	88.9	103.3
	Dec 05, 21-Dec 18, 21	1,279	169.7	160.5	179.5
	Dec 19, 21-Jan 01, 22	6,792	881.4	860.4	903.0
	Jan 02, 22-Jan 15, 22	20,153	2,674.4	2,637.0	2,712.2
	Jan 16, 22-Jan 29, 22	11,891	1,600.8	1,571.8	1,630.4
Black	Mar 01, 20-Mar 14, 20	36	13.6	9.6	19.3
	Mar 15, 20-Mar 28, 20	213	76.7	66.6	88.4
	Mar 29, 20-Apr 11, 20	319	116.3	103.5	130.6
	Apr 12, 20-Apr 25, 20	311	106.2	94.6	119.2
	Apr 26, 20-May 09, 20	213	71.6	62.2	82.3
	May 10, 20-May 23, 20	160	51.7	44.1	60.8
	May 24, 20-Jun 06, 20	133	45.2	37.7	54.1
	Jun 07, 20-Jun 20, 20	195	62.2	53.8	72.1
	Jun 21, 20-Jul 04, 20	387	121.4	109.4	134.7

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Jul 05, 20-Jul 18, 20	512	159.4	145.8	174.3
	Jul 19, 20-Aug 01, 20	567	183.5	168.4	199.9
	Aug 02, 20-Aug 15, 20	522	172.1	157.4	188.2
	Aug 16, 20-Aug 29, 20	324	104.6	93.4	117.1
	Aug 30, 20-Sept 12, 20	246	80.1	70.3	91.3
	Sept 13, 20-Sept 26, 20	278	89.9	79.5	101.6
	Sept 27, 20-Oct 10, 20	365	113.8	102.3	126.5
	Oct 11, 20-Oct 24, 20	425	135.4	122.6	149.4
	Oct 25, 20-Nov 07, 20	941	289.8	271.5	309.4
	Nov 08, 20-Nov 21, 20	1,512	479.3	455.0	505.0
	Nov 22, 20-Dec 05, 20	1,632	532.2	505.9	559.9
	Dec 06, 20-Dec 19, 20	1,554	516.5	490.2	544.1
	Dec 20, 20-Jan 02, 21	1,275	419.2	395.8	443.9
	Jan 03, 21-Jan 16, 21	1,277	409.3	386.6	433.3
	Jan 17, 21-Jan 30, 21	825	269.3	250.8	289.2
	Jan 31, 21-Feb 13, 21	491	160.9	146.7	176.6

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Feb 14, 21-Feb 27, 21	435	141.9	128.6	156.5
	Feb 28, 21-Mar 13, 21	433	136.4	123.8	150.3
	Mar 14, 21-Mar 27, 21	590	184.8	170.1	200.8
	Mar 28, 21-Apr 10, 21	843	255.0	238.0	273.2
	Apr 11, 21-Apr 24, 21	1,135	345.7	325.7	366.9
	Apr 25, 21-May 08, 21	1,071	329.9	310.2	350.8
	May 09, 21-May 22, 21	671	206.1	190.7	222.7
	May 23, 21-June 05, 21	506	155.5	142.2	170.1
	June 06, 21-June 19, 21	401	125.3	113.3	138.7
	June 20, 21-July 03, 21	305	94.1	83.8	105.6
	July 04, 21-July 17, 21	448	133.3	121.3	146.4
	July 18, 21-July 31, 21	922	278.9	261.1	297.9
	Aug 01, 21-Aug 14, 21	1,464	449.2	426.3	473.4
	Aug 15, 21-Aug 28, 21	1,615	506.2	481.4	532.2
	Aug 29, 21-Sept 11, 21	1,458	462.3	438.4	487.6
	Sept 12, 21-Sept 25, 21	1,249	389.4	367.9	412.3

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
NHPI	Sept 26, 21-Oct 09, 21	979	303.4	284.4	323.6
	Oct 10, 21-Oct 23, 21	885	279.3	261.0	298.9
	Oct 24, 21-Nov 06, 21	668	210.5	194.7	227.7
	Nov 07, 21-Nov 20, 21	493	155.8	142.1	170.7
	Nov 21, 21-Dec 04, 21	507	154.9	141.7	169.3
	Dec 05, 21-Dec 18, 21	1,079	329.2	309.8	349.9
	Dec 19, 21-Jan 01, 22	4,729	1,450.1	1,408.4	1,493.1
	Jan 02, 22-Jan 15, 22	10,240	3,179.1	3,116.5	3,243.0
	Jan 16, 22-Jan 29, 22	5,572	1,747.4	1,700.8	1,795.3
	Mar 01, 20-Mar 14, 20	11	24.9	12.8	48.6
	Mar 15, 20-Mar 28, 20	35	89.0	59.3	133.7
	Mar 29, 20-Apr 11, 20	68	158.8	119.7	210.8
	Apr 12, 20-Apr 25, 20	102	192.4	155.9	237.3
	Apr 26, 20-May 09, 20	89	171.6	136.8	215.3
	May 10, 20-May 23, 20	119	216.5	177.9	263.5
	May 24, 20-Jun 06, 20	147	261.2	217.2	314.1

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Jun 07, 20-Jun 20, 20	208	366.9	316.7	425.1
	Jun 21, 20-Jul 04, 20	200	363.3	311.1	424.2
	Jul 05, 20-Jul 18, 20	155	270.5	228.2	320.6
	Jul 19, 20-Aug 01, 20	116	212.1	172.5	260.9
	Aug 02, 20-Aug 15, 20	114	222.0	179.7	274.3
	Aug 16, 20-Aug 29, 20	127	238.1	195.5	290.0
	Aug 30, 20-Sept 12, 20	117	218.5	177.3	269.2
	Sept 13, 20-Sept 26, 20	98	182.8	145.9	229.1
	Sept 27, 20-Oct 10, 20	115	225.9	181.8	280.7
	Oct 11, 20-Oct 24, 20	124	242.5	196.2	299.7
	Oct 25, 20-Nov 07, 20	253	460.7	401.8	528.3
	Nov 08, 20-Nov 21, 20	473	850.2	769.3	939.6
	Nov 22, 20-Dec 05, 20	441	827.8	741.6	923.9
	Dec 06, 20-Dec 19, 20	445	815.1	732.4	907.2
	Dec 20, 20-Jan 02, 21	460	869.5	782.8	965.8
	Jan 03, 21-Jan 16, 21	493	858.6	778.2	947.3

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Jan 17, 21-Jan 30, 21	421	778.0	697.0	868.4
	Jan 31, 21-Feb 13, 21	325	605.9	535.9	685.2
	Feb 14, 21-Feb 27, 21	226	386.8	336.0	445.4
	Feb 28, 21-Mar 13, 21	149	265.7	222.7	317.0
	Mar 14, 21-Mar 27, 21	215	366.6	317.5	423.2
	Mar 28, 21-Apr 10, 21	220	387.1	334.4	448.2
	Apr 11, 21-Apr 24, 21	343	581.5	517.9	652.8
	Apr 25, 21-May 08, 21	326	523.3	465.2	588.8
	May 09, 21-May 22, 21	241	419.3	363.0	484.3
	May 23, 21-June 05, 21	153	255.4	213.9	304.9
	June 06, 21-June 19, 21	126	201.9	167.8	243.1
	June 20, 21-July 03, 21	94	163.8	131.1	204.7
	July 04, 21-July 17, 21	176	294.2	249.7	346.7
	July 18, 21-July 31, 21	225	370.7	320.7	428.6
	Aug 01, 21-Aug 14, 21	488	820.5	741.9	907.4
	Aug 15, 21-Aug 28, 21	561	986.2	897.9	1,083.3

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
Multiracial	Aug 29, 21-Sept 11, 21	589	998.5	912.5	1,092.6
	Sept 12, 21-Sept 25, 21	456	810.7	730.8	899.3
	Sept 26, 21-Oct 09, 21	360	635.5	566.0	713.6
	Oct 10, 21-Oct 23, 21	356	596.7	531.3	670.2
	Oct 24, 21-Nov 06, 21	319	556.4	490.7	631.0
	Nov 07, 21-Nov 20, 21	235	397.1	346.1	455.6
	Nov 21, 21-Dec 04, 21	226	391.0	336.6	454.1
	Dec 05, 21-Dec 18, 21	346	582.3	517.9	654.8
	Dec 19, 21-Jan 01, 22	1,325	2,294.7	2,159.6	2,438.2
	Jan 02, 22-Jan 15, 22	3,128	5,391.5	5,184.1	5,607.2
	Jan 16, 22-Jan 29, 22	1,819	3,256.2	3,090.9	3,430.3
	Mar 01, 20-Mar 14, 20	12	8.9	4.7	16.6
	Mar 15, 20-Mar 28, 20	66	32.7	24.9	43.0
	Mar 29, 20-Apr 11, 20	77	35.1	27.1	45.6
	Apr 12, 20-Apr 25, 20	53	27.4	20.1	37.4
	Apr 26, 20-May 09, 20	58	22.8	17.2	30.4

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	May 10, 20-May 23, 20	48	20.4	14.9	28.0
	May 24, 20-Jun 06, 20	71	32.8	25.3	42.6
	Jun 07, 20-Jun 20, 20	109	36.7	29.4	45.9
	Jun 21, 20-Jul 04, 20	209	67.4	57.4	79.1
	Jul 05, 20-Jul 18, 20	228	87.5	75.2	101.8
	Jul 19, 20-Aug 01, 20	243	94.2	81.1	109.5
	Aug 02, 20-Aug 15, 20	160	55.5	46.0	66.9
	Aug 16, 20-Aug 29, 20	109	37.5	30.2	46.6
	Aug 30, 20-Sept 12, 20	105	37.1	29.3	46.9
	Sept 13, 20-Sept 26, 20	93	35.9	28.3	45.6
	Sept 27, 20-Oct 10, 20	136	51.4	41.9	63.2
	Oct 11, 20-Oct 24, 20	181	65.2	54.8	77.6
	Oct 25, 20-Nov 07, 20	417	147.1	131.2	164.9
	Nov 08, 20-Nov 21, 20	534	187.4	169.6	207.1
	Nov 22, 20-Dec 05, 20	551	199.5	181.2	219.7
	Dec 06, 20-Dec 19, 20	547	195.2	177.2	215.1

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Dec 20, 20-Jan 02, 21	430	154.9	138.8	172.8
	Jan 03, 21-Jan 16, 21	545	191.9	173.7	211.9
	Jan 17, 21-Jan 30, 21	331	114.9	100.8	131.0
	Jan 31, 21-Feb 13, 21	244	81.5	70.0	94.9
	Feb 14, 21-Feb 27, 21	162	56.2	46.6	67.7
	Feb 28, 21-Mar 13, 21	158	56.1	46.6	67.5
	Mar 14, 21-Mar 27, 21	270	94.2	81.8	108.6
	Mar 28, 21-Apr 10, 21	368	112.2	99.8	126.2
	Apr 11, 21-Apr 24, 21	486	153.2	138.1	169.9
	Apr 25, 21-May 08, 21	399	112.4	100.2	126.1
	May 09, 21-May 22, 21	266	73.4	63.8	84.6
	May 23, 21-June 05, 21	173	49.2	41.3	58.7
	June 06, 21-June 19, 21	103	30.6	24.4	38.4
	June 20, 21-July 03, 21	102	31.5	24.7	40.3
	July 04, 21-July 17, 21	170	51.1	42.8	61.0
	July 18, 21-July 31, 21	362	118.0	104.7	133.1

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
AIAN	Aug 01, 21-Aug 14, 21	620	193.3	176.0	212.4
	Aug 15, 21-Aug 28, 21	611	189.0	171.7	208.2
	Aug 29, 21-Sept 11, 21	638	204.1	185.6	224.5
	Sept 12, 21-Sept 25, 21	643	196.4	178.6	215.9
	Sept 26, 21-Oct 09, 21	572	173.6	156.9	192.1
	Oct 10, 21-Oct 23, 21	560	162.6	147.2	179.7
	Oct 24, 21-Nov 06, 21	436	134.8	119.9	151.6
	Nov 07, 21-Nov 20, 21	434	134.8	120.2	151.0
	Nov 21, 21-Dec 04, 21	372	117.5	104.0	132.9
	Dec 05, 21-Dec 18, 21	538	148.9	134.5	164.9
	Dec 19, 21-Jan 01, 22	613	190.5	173.5	209.1
	Jan 02, 22-Jan 15, 22	1,154	317.8	295.8	341.3
	Jan 16, 22-Jan 29, 22	661	181.4	164.9	199.5
	Mar 01, 20-Mar 14, 20	7	9.0	4.1	20.0
	Mar 15, 20-Mar 28, 20	34	38.0	26.9	53.6
	Mar 29, 20-Apr 11, 20	55	62.0	47.4	81.2

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Apr 12, 20-Apr 25, 20	44	46.0	34.2	61.9
	Apr 26, 20-May 09, 20	78	80.6	64.5	100.8
	May 10, 20-May 23, 20	61	64.7	50.1	83.5
	May 24, 20-Jun 06, 20	99	106.4	87.0	130.2
	Jun 07, 20-Jun 20, 20	113	117.1	97.3	141.0
	Jun 21, 20-Jul 04, 20	113	120.8	100.0	145.8
	Jul 05, 20-Jul 18, 20	107	114.9	94.5	139.7
	Jul 19, 20-Aug 01, 20	162	170.5	145.6	199.5
	Aug 02, 20-Aug 15, 20	126	138.8	115.7	166.5
	Aug 16, 20-Aug 29, 20	80	83.4	66.7	104.2
	Aug 30, 20-Sept 12, 20	60	65.0	50.1	84.5
	Sept 13, 20-Sept 26, 20	68	69.2	54.5	87.9
	Sept 27, 20-Oct 10, 20	73	75.5	60.0	95.1
	Oct 11, 20-Oct 24, 20	63	67.1	52.0	86.6
	Oct 25, 20-Nov 07, 20	135	142.4	119.9	169.1
	Nov 08, 20-Nov 21, 20	311	333.5	297.6	373.7

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Nov 22, 20-Dec 05, 20	461	484.1	441.2	531.2
	Dec 06, 20-Dec 19, 20	469	496.4	452.7	544.3
	Dec 20, 20-Jan 02, 21	368	389.3	350.8	431.9
	Jan 03, 21-Jan 16, 21	397	409.2	370.6	451.9
	Jan 17, 21-Jan 30, 21	291	302.9	269.5	340.5
	Jan 31, 21-Feb 13, 21	249	257.1	226.7	291.6
	Feb 14, 21-Feb 27, 21	167	170.8	146.5	199.1
	Feb 28, 21-Mar 13, 21	169	170.1	146.2	197.9
	Mar 14, 21-Mar 27, 21	170	171.1	147.1	199.0
	Mar 28, 21-Apr 10, 21	201	206.9	179.7	238.2
	Apr 11, 21-Apr 24, 21	258	262.2	231.7	296.6
	Apr 25, 21-May 08, 21	212	217.5	189.7	249.2
	May 09, 21-May 22, 21	193	195.9	169.9	225.9
	May 23, 21-June 05, 21	107	106.9	88.4	129.3
	June 06, 21-June 19, 21	85	87.9	70.9	109.1
	June 20, 21-July 03, 21	55	58.8	44.7	77.3

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	July 04, 21- July 17, 21	77	78.6	62.6	98.6
	July 18, 21- July 31, 21	242	249.2	219.3	283.1
	Aug 01, 21- Aug 14, 21	453	467.6	426.0	513.4
	Aug 15, 21- Aug 28, 21	609	631.7	582.8	684.6
	Aug 29, 21- Sept 11, 21	627	653.2	603.2	707.3
	Sept 12, 21- Sept 25, 21	551	567.7	521.4	618.0
	Sept 26, 21- Oct 09, 21	494	509.4	465.7	557.2
	Oct 10, 21- Oct 23, 21	430	443.4	402.9	487.9
	Oct 24, 21- Nov 06, 21	343	351.5	315.8	391.2
	Nov 07, 21- Nov 20, 21	239	244.7	215.0	278.5
	Nov 21, 21- Dec 04, 21	217	224.1	195.8	256.4
	Dec 05, 21- Dec 18, 21	225	232.6	203.7	265.7
	Dec 19, 21- Jan 01, 22	675	696.4	645.1	751.9
	Jan 02, 22- Jan 15, 22	2,026	2,087.1	1,996.8	2,181.4
	Jan 16, 22- Jan 29, 22	1,543	1,579.2	1,501.5	1,660.9

Source: Washington Disease Reporting System (WDRS)

Cumulative crude confirmed or probable case counts and percentages by language spoken

Analysis of language spoken provides another important method to understand health disparities and communities impacted by COVID-19. Use of one method alone may mask health disparities and community-specific impacts. Almost half of reported confirmed or probable cases are missing information on primary language. Despite missing data, there are some important observations.

The following table presents counts and percentages of confirmed or probable cases, by primary language spoken. The percentage of the Washington state population 5 years and over with limited English proficiency that speak each language are also included to provide context. The information on the percentage of the Washington state population with limited English proficiency come from the Office of Financial Management 2016 estimates. Findings should be interpreted with caution due to the high proportion of missing data (75%).

Table 4. Confirmed or probable COVID-19 case count and percentage of cases by primary language spoken

Language	Case Count	% of Cases	% of WA Population with Limited English Proficiency*
All Cases	1,385,699	100.0%	
Unknown Language	1,037,528	74.9%	
Known Language	348,171	25.1%	
English	301,035	86.5*%	
Spanish	39,865	11.4*%	6.4
Marshallese	351	0.1*%	0.1
Vietnamese	1,260	0.4*%	0.5
Russian	1,724	0.5*%	0.3
Chinese (all)	449	0.1*%	0.3
Ukrainian	301	0.1*%	0.2
Somali	362	0.1*%	0.1
Tagalog	170	0.0*%	0.1
Amharic	203	0.1*%	0.1

Language	Case Count	% of Cases	% of WA Population with Limited English Proficiency*
Other	2,451	0.7*%	

*For more information on the selected WA populations by primary language reported here, please see the WA OFM methodology, https://ofm.wa.gov/sites/default/files/public/legacy/pop/subject/ofm_pop_limited_english_proficiency_methodology.pdf

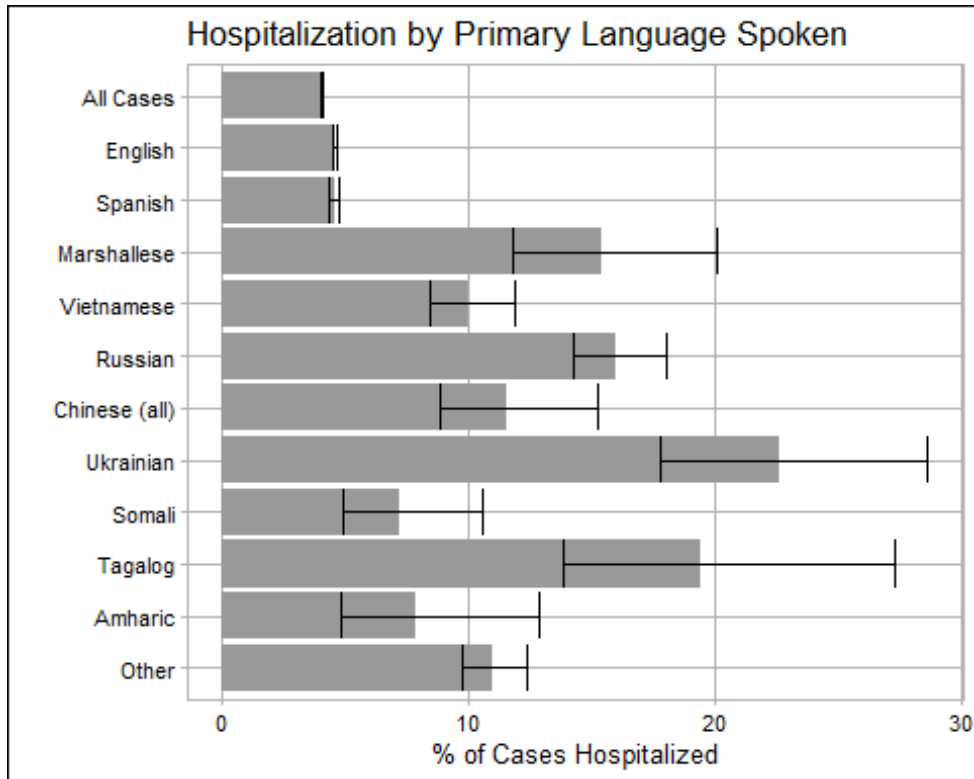
Cumulative hospitalization percentages among confirmed or probable COVID-19 cases by language spoken

The following table and graph present the percentages of confirmed or probable cases who were hospitalized, by primary language spoken. The high rates of hospitalizations among confirmed or probable cases whose primary language was other than English or Spanish suggests that increased exposures and/or barriers to care may contribute to more severe disease in these populations. Languages with less than 10 individuals hospitalized were removed from this analysis to protect patient confidentiality. Findings should be interpreted with caution due to the high proportion of missing data (75%).

Table 5: Percentages of confirmed or probable COVID-19 cases hospitalized by primary language spoken

Language	Case Count	Hospitalization Count	% language specific cases hospitalized
All Cases	1,385,699	56,025	4%
English	301,035	13,700	4.6%
Spanish	39,865	1,810	4.5%
Marshallese	351	54	15.4%
Vietnamese	1,260	126	10%
Russian	1,724	276	16%
Chinese (all)	449	52	11.6%
Ukrainian	301	68	22.6%
Somali	362	26	7.2%
Tagalog	170	33	19.4%

Language	Case Count	Hospitalization Count	% language specific cases hospitalized
Amharic	203	16	7.9%
Other	2,451	268	10.9%



Washington State Department of
Health